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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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SNELL & WILMER LLP 600 ANTON BOULEVARD SUITE 1400 COSTA MESA, CA 92626			SHEPARD, JUSTIN E	
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			2617	

DATE MAILED: 12/16/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<p align="center">Office Action Summary</p>	<p>Application No.</p> <p align="center">09/901,279</p>	<p>Applicant(s)</p> <p align="center">FUJITA, KIMIKAZU</p>	
	<p>Examiner</p> <p align="center">Justin E. Shepard</p>	<p>Art Unit</p> <p align="center">2617</p>	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4,9,11,12 and 14-23 is/are pending in the application.
- 4a) Of the above claim(s) 5-8,10 and 13 is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-4,9,11,12 and 14-23 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date ____ | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed on 10/21/2005 have been fully considered but they are not persuasive.

On page 22, the applicant argues that "the auxiliary data is distributed in "non-real time."" In the later dependent claims, the applicant discloses that a caching instruction can be sent before the starting time of the specified program. The examiner interprets this as meaning that the program data can be sent before the specified program, and cached locally. Caching the data would be used in a system where the data was received in non-real time, and therefore the argument is moot.

On page 22, the applicant argues that "This auxiliary data may arguably correspond to the audiovisual data of a specific program in the present invention, which is different from the program data of the present invention." The examiner states that the claim does not disclose any limitations of the program data not being audio/visual data and therefore audio/visual data is considered to be program data.

On page 23, the applicant argues that "the reference does not disclose or suggest that the program data of a first and second program are sharing the broadcasting bandwidth. Rather, the reference only suggests that the auxiliary data is transmitted at an earlier time by multiplexing it with primary programs." In the applicants drawings; figure 2, part 111 shows a multiplexer to multiplex the audio/visual data with the other data. This figure shows that the applicant's invention multiplexes data in a

means to share the bandwidth. If this is not the case then the applicant has not disclosed how his multiplexing is different from multiplexing found in the art.

2. On page 24, lines 20 and 21 the applicant argues that Elderling does not "disclose or suggest a means for the "repeated" transmission of program data." The examiner is interpreting "sending the data whenever there is spare bandwidth" as being equivalent to the limitation listed above. Sending data whenever there is spare bandwidth is interpreted as sending the data in small bursts or packets whenever there is extra bandwidth, and this "repeated" sending of the program data in bursts is sufficient to meet the limitation of the claim.

The applicant is arguing that adding Suzuki to Elderling would not overcome the limitations disclosed because Elderling does not meet the limitations of the parent claim. The combination and motivation are legitimate and the rejections stand.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 2, 4, 15, 18, and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Elderling, U.S. Patent Number 6,615,039.

3. Referring to claim 1 (refer to claim 1 of the other application), Elderling discloses a broadcasting apparatus (column 2, lines 35-38; figure 2, parts 211 and 209) that

broadcasts a specific program to which a reproduction time period between a starting time and a finishing time is specified (figure 7, box labeled "PROGRAMMING"; figure 9; Note: the time for inserting the advertisement listed in the "Insert Time" column indicates that the program from figure 7 must have a planned start and stop time), the reproduction being performed by a receiving apparatus (figure 2, part 209), the broadcasting apparatus comprising: allotment means for allotting a broadcasting bandwidth for the reproduction time period to the specific program (column 9, line 67, column 10, lines 1-3) and allotting a part of the broadcasting bandwidth for a preceding time period immediately before the reproduction time period to the specific program and the other part of the broadcasting bandwidth to other program (column 10, lines 2-3, 8-10; figure 7, part AD1 and signals running from part 802 to 806); and transmission means, in accordance with the result of allotment by the allotment means, for (a) repeatedly transmitting program data of the other program while transmitting program data of the specific program in the preceding time period (column 10, lines 37-41; Note: sending the data whenever there is spare bandwidth is being interpreted as being equivalent to repeatedly sending data), and (b) repeatedly transmitting the program data of the specific program in the reproduction time period (column 10, lines 37-41), wherein the transmission means further transmits a normal program that includes a video stream and an audio stream (column 6, lines 40-44), the specific program has the program data that relates to a commercial message which is inserted in the normal program (column 6, lines 40-44).

Elderling does not disclose an apparatus where the reproduction time period of the specific program is the same as a broadcast time period of the commercial message.

Elderling discloses that the data rate for the video can be in the range or 27-155 Mbps, while the commercial is broadcast at 1.5 Mbps (column 7, lines 41-46).

At the time of the invention it would have been obvious for one of ordinary skill in the art to have the time required to broadcast a commercial equal to the reproduction time of the program during which the commercial would be played. Their motivation would be that: 1. Elderling shows that a commercial could be broadcast at 1.5 Mbps, while the program itself would require 27-155 Mbps. If the commercial was 0.5 minutes, and the program was 29.5 minutes then the program would need to be broadcast at 88.5 Mbps (if the program and commercial were shown at the same resolution), which falls within the range of 27-155 Mbps. 2. The commercials are usually shown after the program has finished airing, and therefore it would be obvious to transmit the commercial during the replaying to the entire episode to save on bandwidth costs.

4. Referring to claim 2, Elderling discloses an apparatus of Claim 1, wherein the allotment means allots the broadcasting bandwidth for the preceding time period so that the part of the broadcasting bandwidth becomes narrower than the other part of the broadcasting bandwidth (column 7, lines 29-37; Note: as the advertisement gets downloaded the bandwidth for the program is going to decrease), and the preceding time period is longer than a time period that is necessary for transmitting the program data of the specific program at least once using the part of the bandwidth (column 7,

lines 31-32; Note: advertisements being downloaded shortly in advance is being interpreted as equivalent to downloading them in a shorter amount of time than it takes to reproduce them).

5. Referring to claim 4, Eldering discloses an apparatus of Claim 1, further comprising: storage means for storing as the program data of the specific program first contents data that makes up the specific program (figure 5, "AD1") and (b) second contents data that is different from the first contents data in part (figure 5, "AD2"), wherein the transmission means transmits the first contents data in the preceding time period and transmits the second contents data in the reproduction time period of the specific program (column 7, lines 29-34).

6. Referring to claim 15, Eldering discloses a broadcasting method for broadcasting a specific program to which a reproduction time period between a starting time and a finishing time is specified (figure 7, figure 9), the reproduction being performed by a receiving apparatus (figure 2, part 209), the broadcasting method comprising the steps of: an allotment step for allotting a broadcasting bandwidth for the reproduction time period to the specific program (figure 7) and allotting a part of the broadcasting bandwidth for a preceding time period immediately before the reproduction time period to the specific program and the other part of the broadcasting bandwidth to other program (column 7, lines 29-37); and a transmission step, in accordance with the result of allotment in the allotment step, for (a) repeatedly transmitting program data of the other program while transmitting program data of the specific program in the preceding time period (column 10, lines 37-45), and (b) repeatedly transmitting the program data

of the specific program in the reproduction time period (column 10, lines 37-45), wherein the transmission means further transmits a normal program that includes a video stream and an audio stream (column 6, lines 40-44), the specific program has the program data that relates to a commercial message which is inserted in the normal program (column 6, lines 40-44).

Elderling does not disclose an apparatus where the reproduction time period of the specific program is the same as a broadcast time period of the commercial message.

Elderling discloses that the data rate for the video can be in the range of 27-155 Mbps, while the commercial is broadcast at 1.5 Mbps (column 7, lines 41-46).

At the time of the invention it would have been obvious for one of ordinary skill in the art to have the time required to broadcast a commercial equal to the reproduction time of the program during which the commercial would be played. Their motivation would be that: 1. Elderling shows that a commercial could be broadcast at 1.5 Mbps, while the program itself would require 27-155 Mbps. If the commercial was 0.5 minutes, and the program was 29.5 minutes then the program would need to be broadcast at 88.5 Mbps (if the program and commercial were shown at the same resolution), which falls within the range of 27-155 Mbps. 2. The commercials are usually shown after the program has finished airing, and therefore it would be obvious to transmit the commercial during the replaying to the entire episode to save on bandwidth costs.

7. Referring to claim 18, Elderling discloses a program recording medium which is readable for a computer in a broadcasting apparatus (column 4, lines 30-33; Note: use

on the internet is being interpreted as being used on a computer, which would run a program), the broadcasting apparatus broadcasts a specific program to which a reproduction time period between a starting time and finishing time is specified (figure 7, figure 9), the reproduction being performed by a receiving apparatus the computer program embodied on the program recording medium has the computer conduct the steps of: an allotment step for allotting a broadcasting bandwidth for the reproduction time period to the specific program (figure 7, figure 9) and allotting a part of the broadcasting bandwidth for a preceding time period immediately before the reproduction time period to the specific program and the other part of the broadcasting bandwidth to other program (column 7, lines 29-37); and a transmission step, in accordance with the result of allotment in the allotment step, for (a) repeatedly transmitting program data of the other program while transmitting program data of the specific program in the preceding time period, and (b) repeatedly transmitting the program data of the specific program in the reproduction time period (column 10, lines 37-45), wherein the transmission means further transmits a normal program that includes a video stream and an audio stream (column 6, lines 40-44), the specific program has the program data that relates to a commercial message which is inserted in the normal program (column 6, lines 40-44).

Elderling does not disclose an apparatus where the reproduction time period of the specific program is the same as a broadcast time period of the commercial message.

Elderling discloses that the data rate for the video can be in the range or 27-155 Mbps, while the commercial is broadcast at 1.5 Mbps (column 7, lines 41-46).

At the time of the invention it would have been obvious for one of ordinary skill in the art to have the time required to broadcast a commercial equal to the reproduction time of the program during which the commercial would be played. Their motivation would be that: 1. Elderling shows that a commercial could be broadcast at 1.5 Mbps, while the program itself would require 27-155 Mbps. If the commercial was 0.5 minutes, and the program was 29.5 minutes then the program would need to be broadcast at 88.5 Mbps (if the program and commercial were shown at the same resolution), which falls within the range of 27-155 Mbps. 2. The commercials are usually shown after the program has finished airing, and therefore it would be obvious to transmit the commercial during the replaying to the entire episode to save on bandwidth costs.

8. Referring to claim 21, Elderling discloses a program that is readable for a computer in a broadcasting apparatus (column 4, lines 30-33), the broadcasting apparatus broadcasts a specific program to which a reproduction time period between a starting time and finishing time is specified (figure 7), the reproduction being performed by a receiving apparatus (figure 2, part 201), the program has the computer conduct the steps of: an allotment step for allotting a broadcasting bandwidth for the reproduction time period to the specific program (figure 7) and allotting a part of the broadcasting bandwidth for a preceding time period immediately before the reproduction time period to the specific program and the other part of the broadcasting bandwidth to other program (column 7, lines 29-37); and a transmission step, in accordance with the result

of allotment in the allotment step, for (a) repeatedly transmitting program data of the other program while transmitting program data of the specific program in the preceding time period, and (b) repeatedly transmitting the program data of the specific program in the reproduction time period (column 10, lines 37-45), wherein the transmission means further transmits a normal program that includes a video stream and an audio stream (column 6, lines 40-44), the specific program has the program data that relates to a commercial message which is inserted in the normal program (column 6, lines 40-44).

Elderling does not disclose an apparatus where the reproduction time period of the specific program is the same as a broadcast time period of the commercial message.

Elderling discloses that the data rate for the video can be in the range of 27-155 Mbps, while the commercial is broadcast at 1.5 Mbps (column 7, lines 41-46).

9. At the time of the invention it would have been obvious for one of ordinary skill in the art to have the time required to broadcast a commercial equal to the reproduction time of the program during which the commercial would be played. Their motivation would be that: 1. Elderling shows that a commercial could be broadcast at 1.5 Mbps, while the program itself would require 27-155 Mbps. If the commercial was 0.5 minutes, and the program was 29.5 minutes then the program would need to be broadcast at 88.5 Mbps (if the program and commercial were shown at the same resolution), which falls within the range of 27-155 Mbps. 2. The commercials are usually shown after the program has finished airing, and therefore it would be obvious to transmit the commercial during the replaying to the entire episode to save on bandwidth costs.

Claims 3, 9, 11, 12, 14, 16, 17, 19, 20, 22, and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Eldering in view of Suzuki.

10. Referring to claim 3, Eldering discloses an apparatus of Claim 1, further comprising: generation means for (a) generating a first instruction that instructs the receiving apparatus to store the program data of the specific program in a storing unit in the receiving apparatus (column 6, lines 40-44), wherein the transmission means transmits a plurality of the first instructions in the preceding time period (Note: to be effective the storage instruction would have to be sent before the program was supposed to be reproduced).

Eldering does not disclose an apparatus of Claim 1, further comprising: generation means for (b) generating a second instruction that instructs the receiving apparatus to reproduce the program data in case that the program data of the specific program has been stored in the storing unit, wherein the transmission means transmits the second instruction at the starting time of the reproduction time period.

Suzuki discloses an apparatus of Claim 1, further comprising: generation means for (b) generating a second instruction that instructs the receiving apparatus to reproduce the program data in case that the program data of the specific program has been stored in the storing unit, wherein the transmission means transmits the second instruction at the starting time of the reproduction time period (column 23, lines 22-25).

At the time of the invention it would have been obvious to a person of ordinary skill in the art to use the reproduction controls from Suzuki in the broadcasting

apparatus disclosed in Eldering. The motivation for doing this would have been to enable the cable network to control which programs were authorized to play on which subscriber's systems.

11. Referring to claim 9, Eldering discloses a broadcasting apparatus that transmits a data broadcasting program and a first and a second specific programs which are inserted in the data broadcasting program (figure 7), the broadcasting apparatus comprising: allotment means for (a) allotting a broadcasting bandwidth for a first time period and a second time period to the first specific program and the second specific program, the first time period and the second time period are a starting time and broadcasting program (figure 5, bottom right hand corner), and (b) allotting a part of the broadcasting bandwidth to the first and the second specific programs and the other part of the broadcasting bandwidth to the data broadcasting program for included in a total time period between a finishing time for broadcasting the data all of time periods other than the first and the second time periods in the total time period (column 7, lines 29-37); and transmission means for repeatedly transmitting the program data of each of the data broadcasting program, the first specific program, and the second specific program in accordance with the result of allotment by the allotment means (column 10, lines 37-45; Note: sending data whenever the channel is idle is interpreted as repeatedly sending the data); and generating a first instruction that program data for storage instruction and a second storage instruct the receiving apparatus to store a the first specific program and a program data for the second specific program in a storing unit in the receiving apparatus (column 6, lines 40-44; Note: different advertisements being

delivered to different television sets in the same household is being interpreted as being equivalent to a storage control signal, as something must control which advertisements get downloaded to which set top box); and control means for controlling the transmission means so as to transmit (a) a plurality of the first storage instructions before the first time period; (c) a plurality of the second storage instructions before the second time period (column 7, lines 29-37), wherein the transmission means further transmits a normal program that includes a video stream and an audio stream (column 6, lines 40-44), the specific program has the program data that relates to a commercial message which is inserted in the normal program (column 6, lines 40-44).

Elderling does not disclose an apparatus where the reproduction time period of the specific program is the same as a broadcast time period of the commercial message.

Elderling discloses that the data rate for the video can be in the range of 27-155 Mbps, while the commercial is broadcast at 1.5 Mbps (column 7, lines 41-46).

At the time of the invention it would have been obvious for one of ordinary skill in the art to have the time required to broadcast a commercial equal to the reproduction time of the program during which the commercial would be played. Their motivation would be that: 1. Elderling shows that a commercial could be broadcast at 1.5 Mbps, while the program itself would require 27-155 Mbps. If the commercial was 0.5 minutes, and the program was 29.5 minutes then the program would need to be broadcast at 88.5 Mbps (if the program and commercial were shown at the same resolution), which falls within the range of 27-155 Mbps. 2. The commercials are usually shown after the

program has finished airing, and therefore it would be obvious to transmit the commercial during the replaying to the entire episode to save on bandwidth costs.

Eldering does not disclose a broadcasting apparatus where the instruction generation means for generating a first reproduction instruction and a second reproduction instruction that instruct a receiving apparatus to reproduce the program data for the first specific program and the program data for the second specific program, respectively, in case that the program data for the first specific program and the program data for the second specific program have been stored in the storing unit; and control means for controlling the transmission means so as to transmit, (b) the first reproduction instruction at the starting time of the first time period, and (d) the second reproduction instruction at the starting time of the second time period.

Suzuki discloses a broadcasting apparatus where the instruction generation means for generating a first reproduction instruction and a second reproduction instruction that instruct a receiving apparatus to reproduce the program data for the first specific program and the program data for the second specific program, respectively, in case that the program data for the first specific program and the program data for the second specific program have been stored in the storing unit; and control means for controlling the transmission means so as to transmit, (b) the first reproduction instruction at the starting time of the first time period, and (d) the second reproduction instruction at the starting time of the second time period (column 23, lines 22-25; Note: if you are caching multiple programs as disclosed in Eldering, it would be obvious that you would need multiple copies of the signals disclosed in Suzuki).

At the time of the invention it would have been obvious to a person of ordinary skill in the art to use the reproduction controls from Suzuki in the broadcasting apparatus disclosed in Eldering. The motivation for doing this would have been to enable the cable network to control which programs were authorized to play on which subscriber's systems.

12. Referring to claim 11, Eldering discloses an apparatus of Claim 9, further comprising: storage means for storing as the program data of the first specific program (a) first contents data that makes up the first specific program (figure 5, "AD1") and (b) second contents data that is different from the first contents data in part (figure 5, "AD2"), wherein the transmission means transmits the first contents data in a time period other than the first time period in the total time period, and transmits the second contents data in the first time period (column 7, lines 29-34).

13. Referring to claim 12, Eldering discloses a broadcasting apparatus that transmits a data broadcasting program and a first and a second specific programs which are inserted in the data broadcasting program (figure 7), the broadcasting apparatus comprising: allotment means for (a) allotting a broadcasting bandwidth period and a second time period to the first specific program and the second specific program (figure 7), the first time period and the second time period are included in a total time period between a starting time and a finishing time for broadcasting the data broadcasting program, and for a first time (b) allotting (1) a broadcasting bandwidth to the data broadcasting data program in the total time period except for the first time period and the second time period (column 7, lines 29-37), (2) a part of the broadcasting bandwidth

to the first specific program for a time period preceding to the first time period in the total time period (column 7, lines 29-37), and (3) a part of the broadcasting bandwidth to the second specific program for a time period preceding to the second time period in the total time period (column 7, lines 29-37); instruction generation means for generating a first storage instruction and a second storage instruction that instruct a receiving apparatus to store a program data for the first specific program and a program data for the second specific program in a storing unit in the receiving apparatus (column 6, lines 40-44; Note: different advertisements going to different television sets in the same household is being interpreted as requiring a control signal to control where the advertisements are downloaded), respectively; transmission means for repeatedly transmitting the program data of each of the data broadcasting program (column 10, lines 37-45), the first specific program, and the second specific program in accordance with the result of allotment by the allotment means; and control means for controlling the transmission means so as to transmit (a) a plurality of the first storage instructions before the first time period, (b) a plurality of the second storage instructions before the second time period (Note: the storage instructions would have to be transmitted prior to the first period or it wouldn't be effective to store the program after the program was supposed to be reproduced), wherein the transmission means further transmits a normal program that includes a video stream and an audio stream (column 6, lines 40-44), the specific program has the program data that relates to a commercial message which is inserted in the normal program (column 6, lines 40-44).

Elderling does not disclose an apparatus where the reproduction time period of the specific program is the same as a broadcast time period of the commercial message.

Elderling discloses that the data rate for the video can be in the range or 27-155 Mbps, while the commercial is broadcast at 1.5 Mbps (column 7, lines 41-46).

At the time of the invention it would have been obvious for one of ordinary skill in the art to have the time required to broadcast a commercial equal to the reproduction time of the program during which the commercial would be played. Their motivation would be that: 1. Elderling shows that a commercial could be broadcast at 1.5 Mbps, while the program itself would require 27-155 Mbps. If the commercial was 0.5 minutes, and the program was 29.5 minutes then the program would need to be broadcast at 88.5 Mbps (if the program and commercial were shown at the same resolution), which falls within the range of 27-155 Mbps. 2. The commercials are usually shown after the program has finished airing, and therefore it would be obvious to transmit the commercial during the replaying to the entire episode to save on bandwidth costs.

Elderling does not disclose a broadcasting apparatus where generating a first reproduction instruction and a second reproduction instruction that instruct the receiving apparatus to reproduce the program data for the first specific program and the program data for the second specific program, respectively, in case that the program data for the first specific program and the program data for the second specific program have been stored in the storing unit; and control means for controlling the transmission means so as to transmit (c) the first reproduction instruction at the starting time of the first time

period, and (d) the second reproduction instruction at the starting time the second time period.

Suzuki discloses a broadcasting apparatus where generating a first reproduction instruction and a second reproduction instruction that instruct the receiving apparatus to reproduce the program data for the first specific program and the program data for the second specific program (column 23, lines 22-25), respectively, in case that the program data for the first specific program and the program data for the second specific program have been stored in the storing unit; and control means for controlling the transmission means so as to transmit (c) the first reproduction instruction at the starting time of the first time period (column 23, lines 22-25), and (d) the second reproduction instruction at the starting time the second time period (column 23, lines 22-25; Note: the program starting directly after the signal is sent is being interpreted as equivalent to the signal being sent at the start time).

At the time of the invention it would have been obvious for a person of ordinary skill in the art to use the reproduction instructions from Suzuki in the broadcast system disclosed by Eldering. The motivation for doing this would have been to enable the cable network to control which programs were authorized to play on which subscriber's systems.

14. Referring to claim 14, Eldering discloses an apparatus of Claim 12, further comprising: storage means for storing as the program data of the first specific program (a) first contents data that makes up the first specific program (figure 5, "AD1") and (b) second contents data that is different from the first contents data in part (figure 5,

“AD2”), wherein the transmission means transmits the first contents data in a time period preceding to the first time period in the total time period, and transmits the second contents data the first time period (column 7, lines 29-34).

15. Referring to claim 16, Eldering discloses a broadcasting method for transmitting a data broadcasting program and a first specific program and a second specific program which are interposed in the data broadcasting program (figure 7), the broadcasting method comprising the steps of: an allotment step for (a) allotting a broadcasting bandwidth for a first time period and a second time period to the first specific program and the second specific program, the first time period and the second time period are included in a total time period between a starting time and a finishing time for broadcasting the data broadcasting program (figure 7), and (b) allotting a part of the broadcasting bandwidth to the first and the second specific programs and the other part of the broadcasting bandwidth to the data broadcasting program for all of time periods other than the first and the second time periods in the total time period (column 7, lines 29-37); an instruction generation step for generating a first storage instruction and a second storage instruction that instruct the receiving apparatus to store a program data for the first specific program and a program data for the second specific program in a storing unit in the receiving apparatus (column 6, lines 40-44), respectively, and a transmission step for transmitting (a) a plurality of the first storage instructions before the first time period, (c) a plurality of the second storage instructions before the second time period, and while repeatedly transmitting the program data of each of the data broadcasting program (column 10, lines 37-41), the first specific program and the second

specific program in accordance with the result of allotment in the allotment step, wherein the transmission means further transmits a normal program that includes a video stream and an audio stream (column 6, lines 40-44), the specific program has the program data that relates to a commercial message which is inserted in the normal program (column 6, lines 40-44).

Elderling does not disclose an apparatus where the reproduction time period of the specific program is the same as a broadcast time period of the commercial message.

Elderling discloses that the data rate for the video can be in the range or 27-155 Mbps, while the commercial is broadcast at 1.5 Mbps (column 7, lines 41-46).

At the time of the invention it would have been obvious for one of ordinary skill in the art to have the time required to broadcast a commercial equal to the reproduction time of the program during which the commercial would be played. Their motivation would be that: 1. Elderling shows that a commercial could be broadcast at 1.5 Mbps, while the program itself would require 27-155 Mbps. If the commercial was 0.5 minutes, and the program was 29.5 minutes then the program would need to be broadcast at 88.5 Mbps (if the program and commercial were shown at the same resolution), which falls within the range of 27-155 Mbps. 2. The commercials are usually shown after the program has finished airing, and therefore it would be obvious to transmit the commercial during the replaying to the entire episode to save on bandwidth costs.

Elderling does not disclose an apparatus where generating a first reproduction instruction and a second reproduction instruction that instruct a receiving apparatus to

reproduce the program data for the first specific program and the program data for the second specific program, respectively, in case that the program data for the first specific program and the program data for the second specific program have been stored in the storing unit; and a transmission step for transmitting (b) the first reproduction instruction at the starting time of the first time period, and (d) the second reproduction instruction at the starting time of the second time period.

Suzuki discloses an apparatus where generating a first reproduction instruction and a second reproduction instruction that instruct a receiving apparatus to reproduce the program data for the first specific program and the program data for the second specific program (column 23, lines 22-25), respectively, in case that the program data for the first specific program and the program data for the second specific program have been stored in the storing unit; and a transmission step for transmitting (b) the first reproduction instruction at the starting time of the first time period (column 23, lines 22-25), and (d) the second reproduction instruction at the starting time of the second time period (column 23, lines 22-25)

At the time of the invention it would have been obvious to a person of ordinary skill in the art to use the reproduction controls from Suzuki in the broadcasting apparatus disclosed in Eldering. The motivation for doing this would have been to enable the cable network to control which programs were authorized to play on which subscriber's systems.

16. Referring to claim 17, Eldering discloses a broadcasting method for transmitting a data broadcasting program and a first specific program and a second

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specific program which are inserted in the data broadcasting program (figure 7), the broadcasting method comprising the steps of: an allotment step for (a) allotting a broadcasting bandwidth for a first time period and a second time period to the first specific program and the second specific program, the first time period and the second time period are included in a total time period between a starting time and a finishing time for broadcasting the data broadcasting program (figure 7), and (b) allotting (1) a broadcasting bandwidth to the data broadcasting data program in the total time period except for the first time period and the second time period, (2) a part of the broadcasting bandwidth to the first specific program for a time period preceding to the first time period in the total time period, and (3) a part of the broadcasting bandwidth to the second specific program for a time period preceding to the second time period in the total time period (column 7, lines 29-37); an instruction generation step for generating a first storage instruction and a second storage instruction that instruct a receiving apparatus to store a program data for the first specific program and a program data for the second specific program in a storing unit in the receiving apparatus (column 6, lines 40-44), respectively, and a transmission step for transmitting (a) a plurality of the first storage instructions before the first time period, (b) a plurality of the second storage instructions before the second time period, while repeatedly transmitting the program data of each of the data broadcasting program, the specific program, and the second specific program (column 10, lines 37-45; Note: the storage instructions would have to be sent before the device would be able to store the programs) in accordance with the result of allotment in the allotment step, wherein the transmission means further transmits a

normal program that includes a video stream and an audio stream (column 6, lines 40-44), the specific program has the program data that relates to a commercial message which is inserted in the normal program (column 6, lines 40-44).

Elderling does not disclose an apparatus where the reproduction time period of the specific program is the same as a broadcast time period of the commercial message.

Elderling discloses that the data rate for the video can be in the range or 27-155 Mbps, while the commercial is broadcast at 1.5 Mbps (column 7, lines 41-46).

At the time of the invention it would have been obvious for one of ordinary skill in the art to have the time required to broadcast a commercial equal to the reproduction time of the program during which the commercial would be played. Their motivation would be that: 1. Elderling shows that a commercial could be broadcast at 1.5 Mbps, while the program itself would require 27-155 Mbps. If the commercial was 0.5 minutes, and the program was 29.5 minutes then the program would need to be broadcast at 88.5 Mbps (if the program and commercial were shown at the same resolution), which falls within the range of 27-155 Mbps. 2. The commercials are usually shown after the program has finished airing, and therefore it would be obvious to transmit the commercial during the replaying to the entire episode to save on bandwidth costs.

Elderling does not disclose an apparatus where generating a first reproduction instruction and a second reproduction instruction that instruct the receiving apparatus to reproduce the program data for the first specific program and the program data for the second specific program, respectively, in case that the program data for the first specific

program and the program data for the second specific program have been stored in the storing unit; and a transmission step for transmitting (c) the first reproduction instruction at the starting time of the first time period, and (d) the second reproduction instruction at the starting time of the second time period.

Suzuki discloses an apparatus where generating a first reproduction instruction and a second reproduction instruction that instruct the receiving apparatus to reproduce the program data for the first specific program and the program data for the second specific program (column 23, lines 22-25), respectively, in case that the program data for the first specific program and the program data for the second specific program have been stored in the storing unit; and a transmission step for transmitting (c) the first reproduction instruction at the starting time of the first time period, and (d) the second reproduction instruction at the starting time of the second time period (Note: the device starts decoding the video as soon as it receives the signal, which is being interpreted as equivalent to transmitting a signal at the beginning of a program).

At the time of the invention it would have been obvious to a person of ordinary skill in the art to use the reproduction controls from Suzuki in the broadcasting apparatus disclosed in Eldering. The motivation for doing this would have been to enable the cable network to control which programs were authorized to play on which subscriber's systems.

17. Referring to claim 19, Eldering discloses a program recording medium which is readable for a computer in a broadcasting apparatus (column 4, lines 30-33), the broadcasting apparatus transmits a data broadcasting program and a first and a

second specific programs which are interposed in the data broadcasting program (figure 7), the computer program embodied on the program recording medium has the computer conduct the steps of: an allotment step for (a) allotting a broadcasting bandwidth for a first time period and a second time period to the first specific program and the second specific program, the first time period and the second time period are included in a total time period between a starting time and a finishing time for broadcasting the data broadcasting program (figure 7), and (b) allotting a part of the broadcasting bandwidth to the first and the second specific programs and the other part of the broadcasting bandwidth to the data broadcasting program for all of time periods other than the first and the second time periods in the total time period (column 7, lines 29-37); an instruction generation step for generating a first storage instruction and a second storage instruction that instruct the receiving apparatus to store a program data for the first specific program and a program data for the second specific program in a storing unit in the receiving apparatus (column 6, lines 40-44), respectively, and a transmission step for transmitting (a) a plurality of the first storage instructions before the first time period, and (c) a plurality of the second storage instructions before the second time period, while repeatedly transmitting the program data of each (column 10, lines 37-45), wherein the transmission means further transmits a normal program that includes a video stream and an audio stream (column 6, lines 40-44), the specific program has the program data that relates to a commercial message which is inserted in the normal program (column 6, lines 40-44).

Elderling does not disclose an apparatus where the reproduction time period of the specific program is the same as a broadcast time period of the commercial message.

Elderling discloses that the data rate for the video can be in the range of 27-155 Mbps, while the commercial is broadcast at 1.5 Mbps (column 7, lines 41-46).

At the time of the invention it would have been obvious for one of ordinary skill in the art to have the time required to broadcast a commercial equal to the reproduction time of the program during which the commercial would be played. Their motivation would be that: 1. Elderling shows that a commercial could be broadcast at 1.5 Mbps, while the program itself would require 27-155 Mbps. If the commercial was 0.5 minutes, and the program was 29.5 minutes then the program would need to be broadcast at 88.5 Mbps (if the program and commercial were shown at the same resolution), which falls within the range of 27-155 Mbps. 2. The commercials are usually shown after the program has finished airing, and therefore it would be obvious to transmit the commercial during the replaying to the entire episode to save on bandwidth costs.

Elderling does not disclose a program where generating a first reproduction instruction and a second reproduction instruction that instruct a receiving apparatus to reproduce the program data for the first specific program and the program data for the second specific program respectively, in case that the program data for the first specific program and the program data for the second specific program have been stored in the storing unit; and a transmission step for transmitting (b) the first reproduction instruction

at the starting time of the first time period, and (d) the second reproduction instruction at the starting time of the second time period.

Suzuki discloses a program where generating a first reproduction instruction and a second reproduction instruction that instruct a receiving apparatus to reproduce the program data for the first specific program and the program data for the second specific program respectively (column 23, lines 22-25), in case that the program data for the first specific program and the program data for the second specific program have been stored in the storing unit; and a transmission step for transmitting (b) the first reproduction instruction at the starting time of the first time period, and (d) the second reproduction instruction at the starting time of the second time period of the data broadcasting program (column 23, lines 22-25), the first specific program, and the second specific program in accordance with the result of allotment in the allotment step. (Note: the device decoding the video after the signal is received is being interpreted as equivalent to transmitting a reproduction instruction at the beginning of a reproduction time).

At the time of the invention it would have been obvious to a person of ordinary skill in the art to use the reproduction controls from Suzuki in the broadcasting apparatus disclosed in Eldering. The motivation for doing this would have been to enable the cable network to control which programs were authorized to play on which subscriber's systems.

18. Referring to claim 20, Eldering discloses a program recording medium which is readable for a computer in a broadcasting apparatus (column 4, lines 30-33),

the broadcasting apparatus transmits a data broadcasting program and a first and a second specific programs which are interposed in the data broadcasting program (figure 7), the computer program embodied on the program recording medium has the computer conduct the steps of: an allotment step for (a) allotting a broadcasting bandwidth for a first time period and a second time period to the first specific program the first time period and the and the second specific program, second time period are included in a total time period between a starting time and a finishing time for broadcasting the data broadcasting program (figure 7), and (b) allotting (1) a broadcasting bandwidth to the data broadcasting data program in the total time period except for the first time period and the second time period (column 7, lines 29-37), (2) a part of the broadcasting bandwidth to the first specific program for a time period preceding to the first time period in the total time period (column 7, lines 29-37), and (3) a part of the broadcasting bandwidth to the second specific program for a time period preceding to the second time period in the total time period (column 7, lines 29-37); an instruction generation step for generating a first storage instruction and a second storage instruction that instruct a receiving apparatus to store a program data for the first specific program and a program data for the second specific program in a storing unit in the receiving apparatus (column 6, lines 40-44), respectively, and a transmission step for transmitting (a) a plurality of the first storage instructions before the first time period, (b) a plurality of the second storage instructions before the second time period, while repeatedly transmitting the program data of each of the data broadcasting program (column 10, lines 37-45), the first specific program, and the second specific

program in accordance with the result of allotment in the allotment step, wherein the transmission means further transmits a normal program that includes a video stream and an audio stream (column 6, lines 40-44), the specific program has the program data that relates to a commercial message which is inserted in the normal program (column 6, lines 40-44).

Elderling does not disclose an apparatus where the reproduction time period of the specific program is the same as a broadcast time period of the commercial message.

Elderling discloses that the data rate for the video can be in the range or 27-155 Mbps, while the commercial is broadcast at 1.5 Mbps (column 7, lines 41-46).

At the time of the invention it would have been obvious for one of ordinary skill in the art to have the time required to broadcast a commercial equal to the reproduction time of the program during which the commercial would be played. Their motivation would be that: 1. Elderling shows that a commercial could be broadcast at 1.5 Mbps, while the program itself would require 27-155 Mbps. If the commercial was 0.5 minutes, and the program was 29.5 minutes then the program would need to be broadcast at 88.5 Mbps (if the program and commercial were shown at the same resolution), which falls within the range of 27-155 Mbps. 2. The commercials are usually shown after the program has finished airing, and therefore it would be obvious to transmit the commercial during the replaying to the entire episode to save on bandwidth costs.

Elderling does not disclose a program where generating a first reproduction instruction and a second reproduction instruction that instruct the receiving apparatus to

reproduce the program data for the first specific program and the program data for the second specific program, respectively, in case that the program data for the first specific program and the program data for the second specific program have been stored in the storing unit; and a transmission step for transmitting (c) the first reproduction instruction the starting time of the first time period, and (d) the second reproduction instruction at the starting time of the second time period.

Suzuki discloses a program where generating a first reproduction instruction and a second reproduction instruction that instruct the receiving apparatus to reproduce the program data for the first specific program and the program data for the second specific program (column 23, lines 22-25), respectively, in case that the program data for the first specific program and the program data for the second specific program have been stored in the storing unit; and a transmission step for transmitting (c) the first reproduction instruction the starting time of the first time period, and (d) the second reproduction instruction at the starting time of the second time period (Note: the device decoding the video after the signal is received is being interpreted as equivalent to transmitting a reproduction instruction at the beginning of a reproduction time).

At the time of the invention it would have been obvious to a person of ordinary skill in the art to use the reproduction controls from Suzuki in the broadcasting apparatus disclosed in Eldering. The motivation for doing this would have been to enable the cable network to control which programs were authorized to play on which subscriber's systems.

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19. Referring to claim 22, Eldering discloses a program that is readable for a computer in a broadcasting apparatus (column 4, lines 30-33), the broadcasting apparatus transmits a data broadcasting program and a first and a second specific programs which are interposed in the data broadcasting program (figure 7), the program has the computer conduct the steps of: an allotment step for (a) allotting a broadcasting bandwidth for a first time period and a second time period to the first specific program and the second specific program, the first time period and the second time period are included in a total time period between a starting time and a finishing time for broadcasting the data broadcasting program (figure 7), and (b) allotting a part of the broadcasting bandwidth to the first and the second specific programs and the other part of the broadcasting bandwidth to the data broadcasting program for all of time periods other than the first and the second time periods in the total time period (column 7, lines 29-37); an instruction generation step generating a first storage instruction and a second storage instruction (column 6, line 40-44) that instruct the receiving apparatus to store a program data for the first specific program and a program data for the second specific program in a storing unit in the receiving apparatus (column 7, lines 29-34), respectively, and a transmission step for transmitting (a) a plurality of the first storage instructions before the first time period, and (c) a plurality of the second storage instructions before the second time period while repeatedly transmitting the program data of each of the data broadcasting program (column 10, line 37-45), the first specific program, and the second specific program in accordance with the result of allotment the allotment step, wherein the transmission means further transmits a normal program that

includes a video stream and an audio stream (column 6, lines 40-44), the specific program has the program data that relates to a commercial message which is inserted in the normal program (column 6, lines 40-44).

Elderling does not disclose an apparatus where the reproduction time period of the specific program is the same as a broadcast time period of the commercial message.

Elderling discloses that the data rate for the video can be in the range or 27-155 Mbps, while the commercial is broadcast at 1.5 Mbps (column 7, lines 41-46).

At the time of the invention it would have been obvious for one of ordinary skill in the art to have the time required to broadcast a commercial equal to the reproduction time of the program during which the commercial would be played. Their motivation would be that: 1. Elderling shows that a commercial could be broadcast at 1.5 Mbps, while the program itself would require 27-155 Mbps. If the commercial was 0.5 minutes, and the program was 29.5 minutes then the program would need to be broadcast at 88.5 Mbps (if the program and commercial were shown at the same resolution), which falls within the range of 27-155 Mbps. 2. The commercials are usually shown after the program has finished airing, and therefore it would be obvious to transmit the commercial during the replaying to the entire episode to save on bandwidth costs.

Elderling does not disclose a program where generating a first reproduction instruction and a second reproduction instruction that instruct a receiving apparatus to reproduce the program data for the first specific program and the program data for the second specific program, respectively, in case that the program data for the first specific

program and the program data for the second specific program have been stored in the storing unit; and a transmission step for transmitting (b) the first reproduction instruction at the starting time the first time period, and (d) the second reproduction instruction at the starting time of the second time period.

Suzuki discloses a program where generating a first reproduction instruction and a second reproduction instruction that instruct a receiving apparatus to reproduce the program data for the first specific program and the program data for the second specific program, respectively, in case that the program data for the first specific program and the program data for the second specific program have been stored in the storing unit; and a transmission step for transmitting (b) the first reproduction instruction at the starting time the first time period, and (d) the second reproduction instruction at the starting time of the second time period (column 23, lines 22-25).

At the time of the invention it would have been obvious to a person of ordinary skill in the art to use the reproduction controls from Suzuki in the broadcasting apparatus disclosed in Eldering. The motivation for doing this would have been to enable the cable network to control which programs were authorized to play on which subscriber's systems.

20. Referring to claim 23, Eldering discloses a program that is readable for a computer in a broadcasting apparatus (column 4, lines 30-33), the broadcasting apparatus transmits a data broadcasting program and a first and a second specific programs which are interposed in the data broadcasting program (figure 7), the program has the computer conduct the steps of: an allotment step for (a) allotting a broadcasting

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bandwidth for a first time period and a second time period to the first specific program and the second specific program, the first time period and the second time period are included in a total time period between a starting time and a finishing time for broadcasting the data broadcasting program (figure 7), and (b) allotting (1) a broadcasting bandwidth to the data broadcasting data program in the total time period except for the first time period and the second time period, (2) a part of the broadcasting bandwidth to the first specific program for a time period preceding to the first time period in the total time period, and (3) a part of the broadcasting bandwidth to the second specific program for a time period preceding to the second time period in the total time period (column 7, lines 29-37); an instruction generation step for generating a first storage instruction and a second storage instruction that instruct a receiving apparatus to store a program data for the first specific program and a program data for the second specific program in a storing unit in the receiving apparatus (column 6, lines 40-44), respectively, and a transmission step for transmitting (a) a plurality of the first storage instructions before the first time period, (b) a plurality of the second storage instructions before the second time period, , while repeatedly transmitting the program data of each of the data broadcasting program (column 10, lines 37-45), the first specific program, and the second specific program in accordance with the result of allotment in the allotment step, wherein the transmission means further transmits a normal program that includes a video stream and an audio stream (column 6, lines 40-44), the specific program has the program data that relates to a commercial message which is inserted in the normal program (column 6, lines 40-44).

Elderling does not disclose an apparatus where the reproduction time period of the specific program is the same as a broadcast time period of the commercial message.

Elderling discloses that the data rate for the video can be in the range or 27-155 Mbps, while the commercial is broadcast at 1.5 Mbps (column 7, lines 41-46).

At the time of the invention it would have been obvious for one of ordinary skill in the art to have the time required to broadcast a commercial equal to the reproduction time of the program during which the commercial would be played. Their motivation would be that: 1. Elderling shows that a commercial could be broadcast at 1.5 Mbps, while the program itself would require 27-155 Mbps. If the commercial was 0.5 minutes, and the program was 29.5 minutes then the program would need to be broadcast at 88.5 Mbps (if the program and commercial were shown at the same resolution), which falls within the range of 27-155 Mbps. 2. The commercials are usually shown after the program has finished airing, and therefore it would be obvious to transmit the commercial during the replaying to the entire episode to save on bandwidth costs.

Elderling does not disclose a program where generating a first reproduction instruction and a second reproduction instruction that instruct the receiving apparatus to reproduce the program data for the first specific program and the program data for the second specific program, respectively, case that the program data for the first specific program and the program data the second specific program have been stored in the storing unit; and a transmission step for transmitting (c) the first reproduction instruction

at the starting time of the first time period, and (d) the second reproduction instruction at the starting time of the second time period.

Suzuki discloses a program where generating a first reproduction instruction and a second reproduction instruction that instruct the receiving apparatus to reproduce the program data for the first specific program and the program data for the second specific program, respectively, case that the program data for the first specific program and the program data the second specific program have been stored in the storing unit; and a transmission step for transmitting (c) the first reproduction instruction at the starting time of the first time period, and (d) the second reproduction instruction at the starting time of the second time period (column 23, lines 22-25).

At the time of the invention it would have been obvious to a person of ordinary skill in the art to use the reproduction controls from Suzuki in the broadcasting apparatus disclosed in Eldering. The motivation for doing this would have been to enable the cable network to control which programs were authorized to play on which subscriber's systems.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Eldering, U.S. Patent Number 6,704,930; Advertisement Insertion Techniques for Digital Video Streams.

Eldering, U.S. Patent Number 6,820,277; Advertisement Management System for Digital Video Streams.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Justin E. Shepard whose telephone number is (571) 272-5967. The examiner can normally be reached on 7:30-5 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris Kelley can be reached on (571) 272-7331. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JS


CHRIS KELLEY
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600